

### **DETAILED ACTION**

#### ***Allowable Subject Matter***

Claims 1-15 and 17-26 are allowed.

The United States patents to Howard (US 1,853,002) and Ikeuchi (US 5,738,701) and the United States patent application publication to Yoshikuni (US 2003/0000252A1) constitute the closest related art of record. In accordance with the decision by the Board of Patent Appeals and Interferences dated June 24, 2011 (see particularly pages 4-6), the noted references fail to render a prima facie case of obviousness for the claimed invention as set forth in Claims 1-15 and 17-26.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON L. LAZORCIK whose telephone number is (571)272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Daniels can be reached on (571) 272-2450. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JASON L LAZORCIK/  
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